



SHEEP AND GOAT CONSULT

21 Th. of August 2017

Restoring Iron age Fields in Western Jutland by burning and sheep grazing





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the next 15 min

AGENDA

- What was starting point?
- What is history
- What is the aim of nature conservation?
- Ressources
- What did we do
- Results so far
- How can the project continue?



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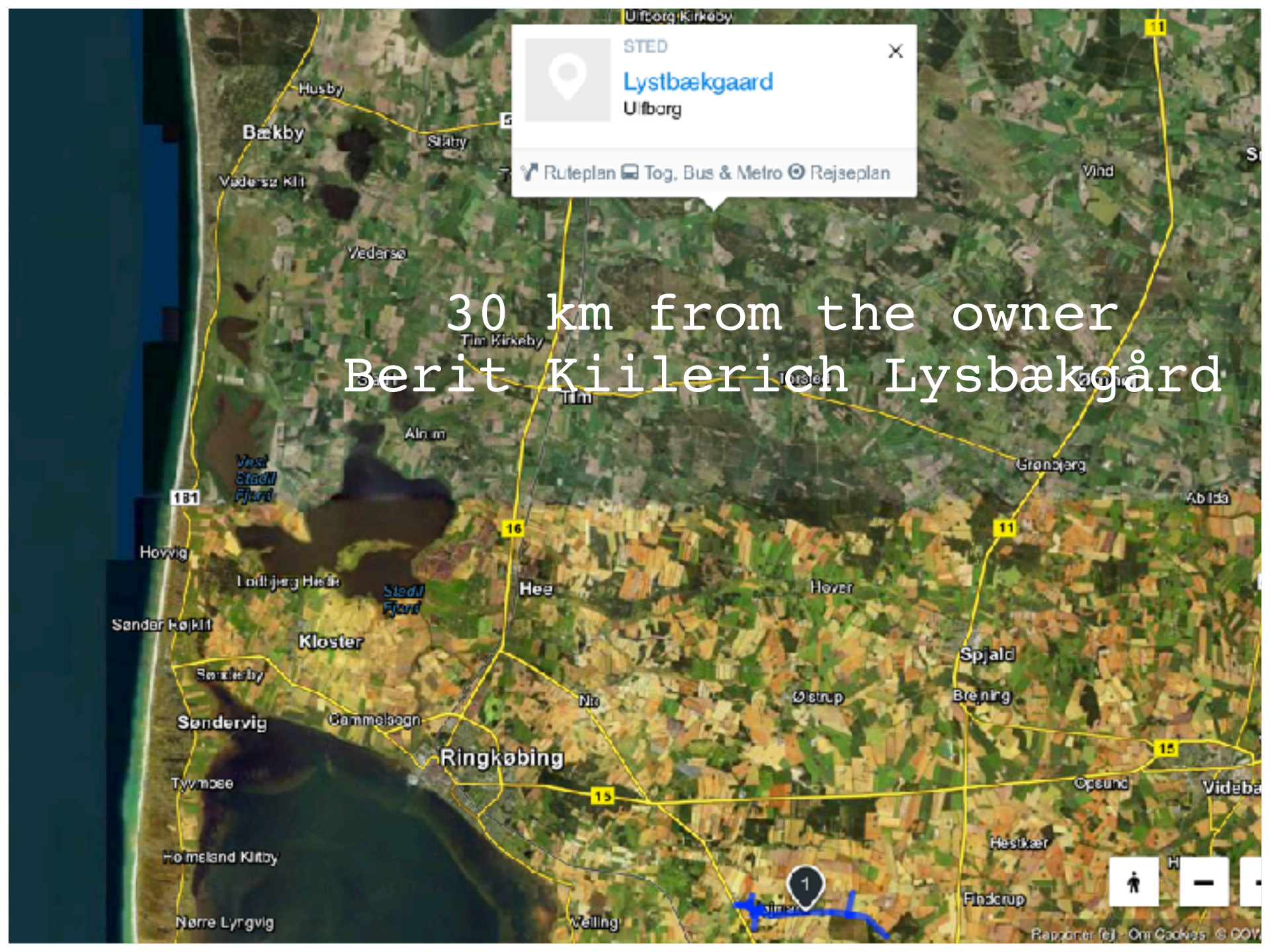
Øster Lem

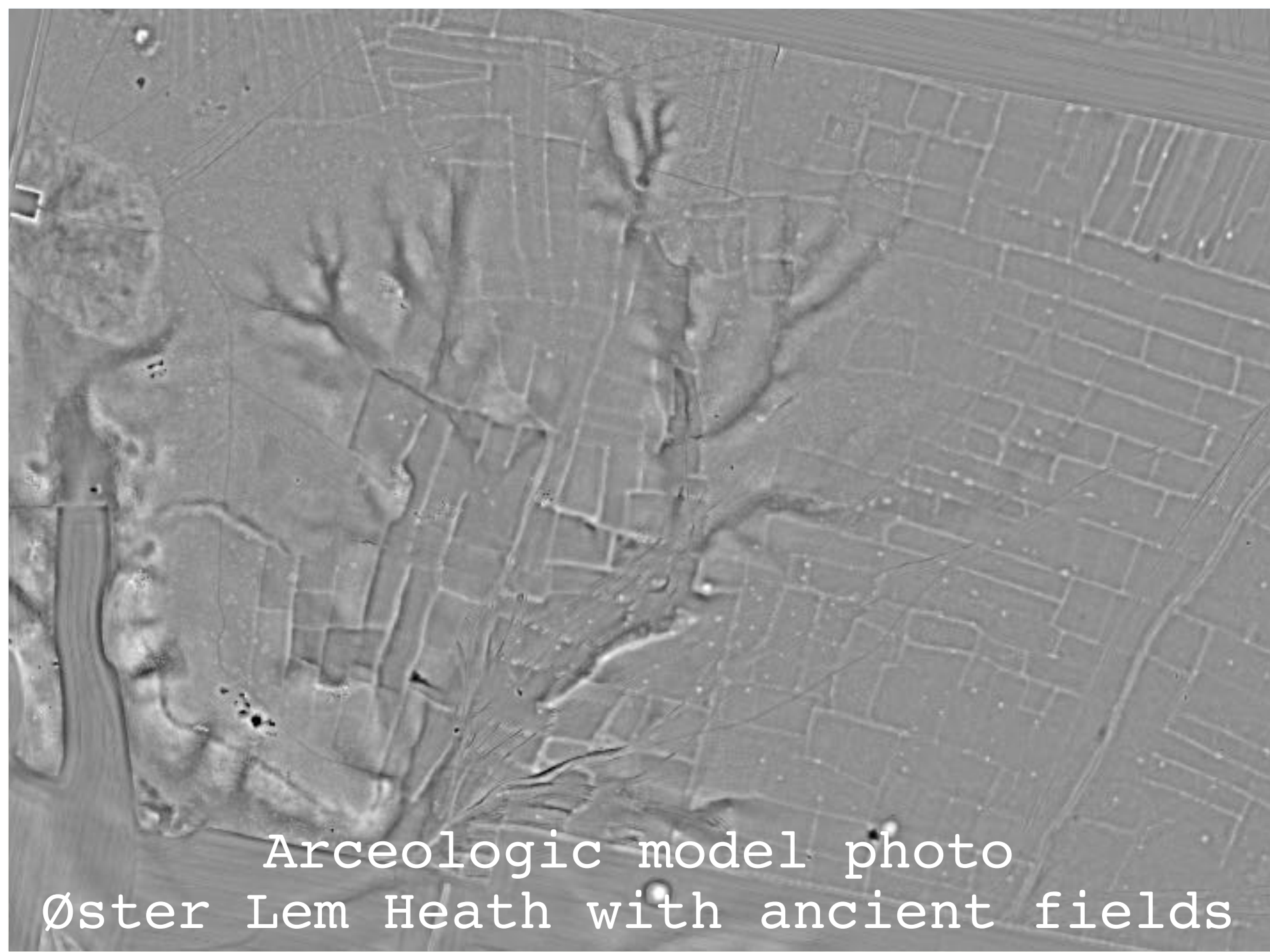


STED
Lystbækgaard
Ulfborg

Ruleplan Tog, Bus & Metro Rejseplan

30 km from the owner
Berit Kiilerich Lysbækgaard





Arceologic model photo
Øster Lem Heath with ancient fields



● Grav.
2000 år gammel

Bop
2000

Udpløjede
jernaldermarker

Kildevæld

Jernaldermarker
(700 f.kr.-200 e.kr.)

Jernaldermarker
i plantagen

Jernaldervej

Archaeologic model photo

Øster Lem Heath with ancient fields

Kort:
Jørgen Egel
Arkeologi V

g adresse, by, produkt, service, firm



August 2017 burning and grazing in
the western part make the fields
visible



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Archeologist

- Tell us that fields found in 1918
- bought privately and saved from ploughing in 1936
- The Forest agency ought to conserve the area since 1965
- our grazing group rented it for free





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Experience with historical areas

WHICH TRACS ARE 700 BC?

- lots of different tracks
- You need strong feet! tracks are dangerous to sheep
- horse need to have good balance
- ATV would be nice if allowed
- I like to know exactly what is protected



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THE AIM IS

- Increase Accessibility of the landscape
- Improve Biodiversity
- Avoid Growth of Trees
- Create Memorable experiences for the public





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CHANGE THE BALANCE

MAKE NATURE SUSTAINABLE

- PURPLE MOOR GRASS => HEATHER
- MOLINIA => CALLUNA
- CROWBERRIES => COWBERRIES
- EMPETRUM => VACCINUM VITIS IDEA
- DEFEAT BIRCH and BRACKEN
- PROTECT ORCHIDS AND ARNICA
- ENJOY BOG BILBERRY (MYRICA GALE),
TORMENTIL ETC.
- EAT WAVY HAIR GRASS (DESCHAMSISSA)



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PLANS UNTIL NOW

2 YEARS GONE, 2 LEFT

- first year national forrest burned 30 ha
- 2 years grazing from May to September 200-300 sheep
- 2 years left for grazing
- Hopefully smaller areas with empetrum and Molinia will Be burned
- Brackens? *Eupteris aquilina* (L. No plans yet



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Purple moor Grass

how do we
get a nice
cover of
heathland
here ?

Who is
responsible
Municipal?
culture
agency
Environment
agency??





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Purple moor Grass

after
burning
30th of
march
2016





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Purple moor Grass

after
burning
30th of
march
2016
tussocks
not hurt





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Purple moor Grass



12th of
may
2016



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Movie from 20th July

175 Ewes
eating
Molina
2017





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Budget

85 ha grazed by herded Ewes and Flex net fences	€	
Shepherd Work hour dog and horses work 25 €/ hour 120 days / season 5 Hours/ day	15,000	
Rent 2-300 Ewes to cover Shearing, transport and Winter supply	11,000	
Fence Watersupply throughs ie., solar Power	7,000	
Costs first year	33,000	



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Uncertain income

AGRICULTURE agency pay

- a year after grazing is started
- 20,000 € if grazing is approved
- you have a great risk and longterm investment.



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Prizes of Equipement

	per unit	units	€ in all
Netfence 50 meters with 14 sticks	100	32	3200
SOLAR POWER ENERGIZER	1000	1	1000
WATER CONTAINER	250	2	500
INVESTS for GRAZING- WANDER SHEPRHERD at WITHOUT FENCE			4700



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Funding of Grazing

	2016	2017	2018
PRIVATE NATURE FUND 15. JUNI FONDEN	13,333	13,333	?
DANISH AGRICULTURE AGENCY (EU)		20,000	20,000
EXPENCES	18,000	11,000	11,000
LEFT FOR shepherd SALERY and DRIVING	-4,667	+23,333	9000



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OTHER COSTS

- HORSES, SHOES
- DOG, FEED FOR DOG
- TRANSPORT OF SHEPHERD TO THE
- MINERALS
- VET





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FOR SORTING AND
WEIGHING THE SHEEP

YOU NEED EQUIPEMENT





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EQUIPEMENT

ENERGIZER





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SOLAR POWER

WORKS ALL
YEAR





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WATER PUMP

SOLAR
ENERGY
1200 €





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Brackens

will cover
large areas





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BRACKENS NOT GRAZED

WE NEED TO
MOVE THEM





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BRACKENS ARE POISON

WE ONLY STEP
ON THEM





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TREES PULLED OUT

NOT ALLOWED
TO DRIVE IN
THE
PROTECTED
FIELDS





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WOOD IS PULLED OUT

AND
CHOPPED





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BIRCH IS A HUGE

PROBLEM

BUT EWES EAT
THE SMALL
TREES AND
CLEAN THE
BURNED AREAS





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EWES LOVE BIRCH

ESPECIALLY
IF THEY
USUALLY
HAVE GRASS





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OLD HEATHER TURN

TO BE DISPLAZED
BY EMPETRUM





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FAST NEW HEATHER

AFTER
BURNING





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HEATHER ONE YEAR

AFTER
BURNING





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HEATHER ONE YEAR

AFTER
BURNING





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RESULTS FIRST YEAR

- The first year after burning new heather plants are flowering. They are sprouting from old heather roots
- Ewes keep the Molinia tussock short and light come in



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2016 GRAZED MOLINIA

HELP NEW PLANTS
TO GET LIGHT





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OUTSIDE GRAZED 2016

INSIDE NOT
picture 19th
April 2017





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IF NOT GRAZED

NO LIGHT





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Results this 2nd year

- 2nd year tussocks of *Molinia* has become smaller
- Small seeds of heather plants and cowberries are germinating
- lots of *Tormentil* and *poly gala vulgaris*
- nice amounts of *arnica montana* and heath spottet orchid (*Dactylorhiza Maculata*)



AUGUST 2017



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Virtual Reality

idea to
tell the
iron age
story





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OTHER INCOME

WOOL
FUR
MEAT





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OTHER INCOME

SHOWS





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OTHER INCOME

SHOWS





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OTHER INCOME???

SHOWS
NEED
ARRANGEMENT





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THE SPECTATOR MUST

COME TO THE
SHEPHERD





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LIVING LANDSCAPE

BUT I AM THE
ONLY SPECTATOR





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Experience with wander shepherd

- shepherd shows the way
- Ewes go to the right places
- Especially in spring when you know what should be fed first
- nice with two night fences



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Experience with wander shepherd

- Ewes with lamb are hungry
- They defend the dog and are difficult to move
- horse is so good if lamb is a problem
- Wolfs make selection for flock instinct



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LAMBS ARE SWEET

BUT
VULNERABLE





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THE MOTHER NEED MORE

FEED FOR
TWO LAMB





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GPS

controls
the traffic





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GPS from 9th august

to tjeck where the ewes are and where they have grazed

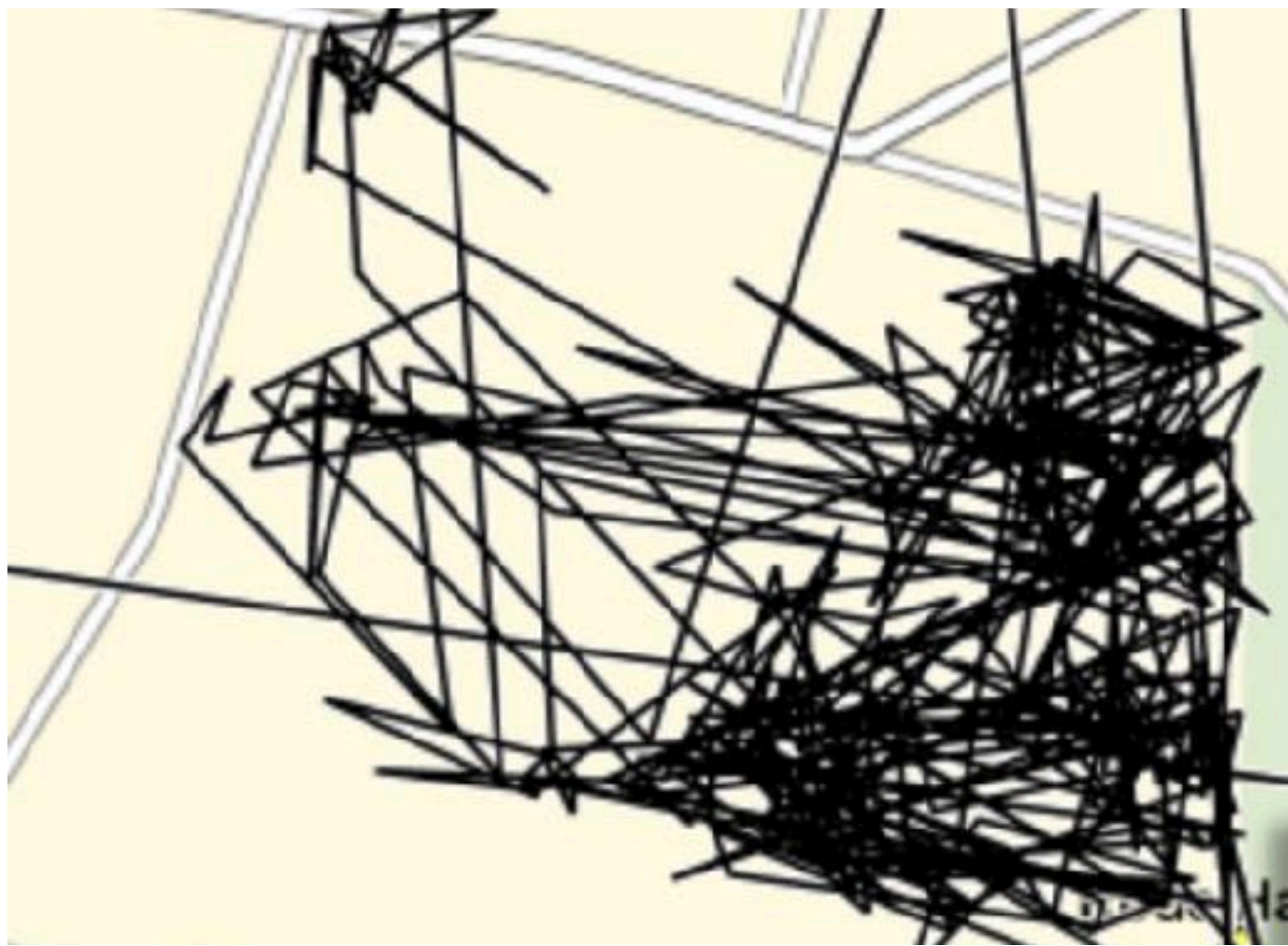




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GPS from 15th june

to check where the ewes are and where they have grazed





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QUESTIONS

WHO KNOWS WHAT IS

- NUTRIENT CONTENT OF HEATH PLANTS IN DIFFERENT STAGES AND TIMES OF THE YEAR?
- LIMITS OF FEED CONSUMPTION AND DIGESTION FOR A SHEEP
- DO YOU KNOW?



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EXPERIENCE MOVING NIGHT FENCES

WATERSUPPLY IMPORTANT

- You are not allowed to drive
- arrange a power wire around the fields
- 4-6ha fits 2-300 ewes for 3 weeks in Molinia fields
- 20-40 ha is ok after all is grazed once



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EQUIPEMENT

FOR WATER





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NETFENCE

OPENINGS EVERY
50 METER





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NET FENCE

EASY FOR
NO MACHINE
AREAS
100€/ 50
METER





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YOU NEED A FORTUNE

TO MAKE NATURE CONSERVATION

- WE NEED SHEPHERD EDUCATION
- EDUCATE SELF EMPLOYED PARTNERS IN A NETWORK
- WE SEARCH PARTNERES FOR ERASMUS +



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SHEPHERD EDUCATION

WE NEED
YOUNG
PEOPLE





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OLD PEOPLE Still have

A LOT TO
LEARN





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FUTURE?

LONGER CONTRACTS

- Educate shepherds
- accept that nature changes are slow
- we hope nice heath without trees will be the result
- but grazing is necessary to keep heath in balance



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Thank you



Questions

hyrdetimer.dk

